



nvironmental Compliance and Remediation

June 25, 2010

Babb & Associates, P.A.

Mr. Ervin Lane, Hydrogeologist Field Operations Branch NC Solid Waste Section Mail Service Center 1646 Raleigh, North Carolina 27699-1646

Re:

2010 First Semi-Annual Water Quality Monitoring Results

Wilson County MSWLF Wilson, North Carolina

Dear Ervin:

Babb & Associates, P.A. has completed the 2010 first semi-annual monitoring event at the Wilson County MSWLF. On May 25, 2010, nine groundwater monitoring wells and five surface water stations were sampled and analyzed for Appendix I parameters. The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and inorganic compounds by EPA Method 6010B. Attached is Figure 1 that identifies sample locations and provides the potentiometric surface of the shallow groundwater.

No VOCs were detected at concentrations exceeding Solid Waste Section Limits (SWSL) in any of the nine groundwater monitoring wells. No VOCs were detected at concentrations exceeding the SWSLs in any of the five surface water samples

Inorganic compounds were detected at concentrations exceeding the SWSLs in five of the nine groundwater monitoring wells (MW-1A, MW-3A, MW-4, MW-5, and MW-6). The inorganic compounds detected in the nine monitoring wells were all below the established 2L Groundwater Standards.

Inorganic compounds were detected above the SWSLs in all five of the surface water samples collected. The compound barium was detected below the establish 2B Surface Water Standard in SW-2, SW-3, and SW-4. The compound zinc was detected in SW-1 and SW-5, also below the established 2B Surface Water Standard.

No other parameters were detected at concentrations equaling or exceeding laboratory quantitation limits in the groundwater or surface water samples collected.

One trip blank was analyzed for volatile organic constituents for QA/QC purposes. The analysis of the trip blank indicated no detectable VOCs above the method detection limits.

Statistical analysis was performed on five inorganic constituents detected in the groundwater during the 2010 first semi-annual sampling event. Statistically significant evidence of contamination was indicated for the compound barium. Barium was detected in monitoring wells MW-1A, MW-3A, MW-4, and MW-5 (see Table 1). The reported concentration of barium in these three wells is well below the 2L Groundwater Standard of 0.7 mg/l. The statistical evaluation for the compound cobalt indicates a statistically significance increase at the 5% significance level. The compound cobalt was detected in monitoring well MW-6 only, at a concentration of 0.0365 mg/l. There is no 2L Groundwater Standard for the compound cobalt. The statistical analysis of the other constituents detected during this sampling event (beryllium, nickel, and zinc) indicates no statistically significant increase in contaminant concentrations at the 5% significance level. The statistical analysis documentation is included with this report.

The groundwater and surface water laboratory analytical results are summarized on Tables 1 and 2, respectively. The laboratory analytical report (Excel and adobe acrobat format), statistical analysis, and the site potentiometric map are also included with this report.

If there are any questions regarding the attached information, please contact the undersigned at (919) 325-0696.

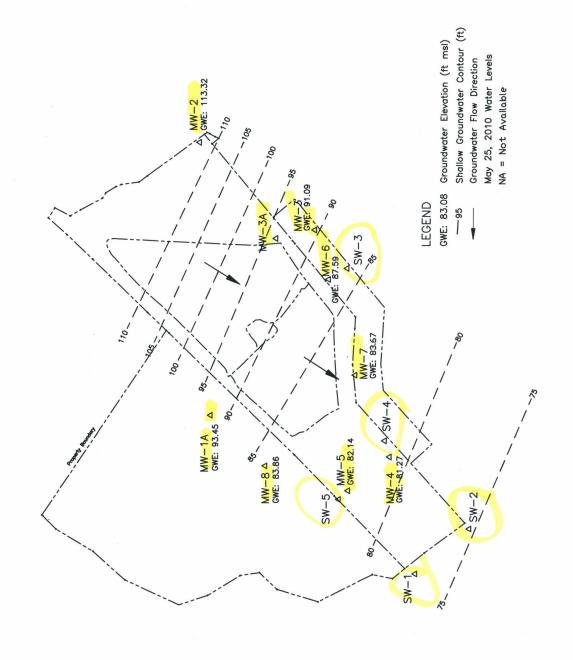
Respectfully,

Babb & Associates, P.A.

Gary D Babb, P.G. President

Attachments

cc: Mr. Andy Davis, Director Wilson County Solid Waste





POTENTIOMETRIC MAP

TITLES

Wilson County Landfill State Road 1503 Wilson, North Carolina

FIGURE NO:	SCALE:	PROJECT NO:
 Figure 1	1"=800	WCLF
CHECKED BY:	DRAWN BY:	DATE:
	G. Babb	5/25/10

P.A.
Associates,
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Babb